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My m² Earth.

A collaborative photo project on global change



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Spreading global change on Earth.
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My m² Earth. A collaborative photo project on global change

IRI THESys & 53 photographers

Abstract

The participatory photo project *My m² Earth* was designed to be an online gallery visualizing localized aspects of global change. Between October 2015 and March 2016, 78 pictures taken by 53 separate photographers were uploaded to the gallery, all of the pictures demonstrating the diversity of global social, economic and environmental change, as well as the visibility of some of the most pressing issues on Earth. The project was initiated by the Integrative Research Institute on Transformations of Human-Environment Systems (IRI THESys) at the Humboldt-Universität zu Berlin in cooperation with the German Committee Future Earth.

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Zhanli Sun

What does global change look like? 78 answers

Today more than ever before, the Earth's 510 billion square meter surface is affected by the actions and reactions of mankind. Global social, economic and environmental change is all around us. Against this background, the collaborative photo project *My m² Earth* asked participants to identify where on Earth they experience and see local aspects of global change within their everyday life.

But where can aspects of change be found? How to visualize climate and environmental change or population and economic growth? Can they be captured with a camera?

From October 15, 2015 to March 15, 2016, *My m² Earth* was designed as an online gallery where the public could upload images and explanatory notes on their vision of global change issues. The idea came from the IRI THESys photo exhibition *m² Earth* at the Humboldt-Universität zu Berlin from November 13, 2014 to December 6, 2014, which allowed two artists to visually represent global change in a series of 1x1 m photographs. With the new online exhibition, everyone interested in the topic of sustainability and global change was welcome to engage. What counted was the photographer's personal view, leading to individual motifs based on one's own experiences and observations. The title *My m² Earth* was purely symbolic, and all uploaded images were automatically cropped into a square meter format. As anthropogenic change not only stands for the destruction of the environment or a loss of biodiversity, but contains both positive and negative impacts and hopeful and alarming aspects, the participants were invited to focus on the whole range of phenomena.

A total of 78 images from 53 photographers were finally submitted. These images showed visual findings from Argentina, Armenia, the Atlantic, Australia, Bolivia, Brazil, Burkina Faso, China, Colombia, Denmark, Ethiopia, Finland, Germany, Ghana, Great Britain, Guinea, Guatemala, Haiti, India, Indonesia, Laos, Mexico, the Philippines, Peru, South Africa, Spain, Sri Lanka, Sweden, Turkey, USA, and Uzbekistan. The results demonstrate an impressive diversity of change, but also uncover some of the most pressing issues on Earth. Presented as snapshots, documentations or artistic compositions, some of the images are taken during holidays or field work, others right on the doorsteps of home.

Among all contributions and in an anonymous process, a jury selected three winning photographs and their accompanying text based on their convincing message and originality: „The waterway“ and „Don't look just at us!“ by Rafael Rodrigues Camargo, and „Our extended summer“ by Margoth González Woge visualize very diverse aspects of water scarcity, land use and climate change.

Overall, *My m² Earth* brought people together in virtual collaboration. The involved participants, students, researchers and citizens were colleagues and friends from the IRI THESys, the Future Earth community, the WWF's and DKK's Massive Open Online Course on climate change, and many „unknown people“, as is typical for online collaborative projects.

Photography as visual mediator

Even though transformation is a never-ending process without a final result, the present lays the groundwork for the future, and change takes place all the time. What kind of images are we usually associating with it?

The polar bear on a melting ice floe or the big eyes of a hungry child are powerful icons of global change that are firmly established in our collective perception and give a face to the challenges that nature and societies are currently confronted with. But since those images are often quite far away from our daily lives, at least in the Global North, those icons sometimes disguise the global character of environmental and societal processes. However, causes and effects of global change are connected across long distances, and the global and the local are inseparably linked with each other and meet at various interfaces. Becoming aware of these teleconnections was one of the project's objectives.

My m² Earth aimed to animate people to hone their visual senses, particularly with regard to how they perceive their surroundings and relationships to the environment. Through a variety of individual motifs, the project aimed to contribute to diversifying our perception of change as each submitted image represents a subjective perspective and captures just a share of the changing Earth as a whole. What emerged are excerpts and

moments of an ever-changing reality which, like pieces of a puzzle, challenge the observers to connect and supplement them with additional ones.

In this sense, photography functions as a visual mediator between scientific and everyday discourse, invites observers to position themselves, and offers the possibility to respond to each other in order to initiate a vivid dialogue on the Earth's Future. The project can therefore also be understood as an experimental approach in response to the necessity of new forms of knowledge production and knowledge exchange within transformation and sustainability research, as expressed, for instance, through interdisciplinary science, citizen participation and experimentation. New research methods and mediation formats including visual approaches are required and can be of profound help when it comes to forging links between different disciplines, as well as between science and society.

Whether or not global change will lead us towards a more sustainable future remains unknown, but achieving sustainability can only be successful if it is approached as a collective task.

My m² Earth was initiated by the Integrative Research Institute on Transformations of Human-Environment Systems (IRI THESys) at the Humboldt-Universität zu Berlin in cooperation with the German Committee Future Earth.

The IRI THESys thanks all participants for their contributions!

Three coequal winning images by two photographers

Water, the most vital element on Earth. Every single person does what is needed to have their share of it. It's time to start thinking long-term. _____



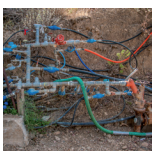
Crete, Greece, June 2014
by Rafael Camargo

the waterway

Explanatory statements of the jury

This picture contains a strong message and plays with the unseen beyond the visible in a very original way. I like how it can be used as a metaphor for how humans address aspects of global change within their daily life: provisionally and temporarily. This is illustrated by showing people who try to get a share of water by adding provisional pipes to the main tap. As we are facing changes of an hitherto unknown dimension, it is perhaps time to find a better and long-term solution.

Anett Kuntosch, researcher at IRI THESys



the waterway

Rafael Rodrigues Camargo is a 28 year-old Brazilian based in Berlin. He used to work as a Speleologist and Environmental Consultant in processes of Environmental Impact Assessment and is now enrolled at the Master's program on Environmental Planning at the Technische Universität Berlin. Rafael won with two images titled "The waterway" and "Don't look just at us!".

Do you take pictures regularly?

I am an amateur photographer, but am really passionate about it. Usually I prefer to take pictures of natural landscapes and inside caves. The latter, however, is a hard task. If we think of photography, it is all about light, but in the underground most of the time we have no light at all. Thus, it is a matter of lightning angle, playing with shades and the fascinating underground of geological formations.

Do you think photographs can influence human behavior?

Photographs can capture or synthesize the photographer's view of the world, and at the same time they can be "universal" enough to evoke different feelings. This intimate moment between the observer and the photograph can bring so much to the surface and makes us reflect about the topic portrayed. Yes, in these reflections there can be a seed of change.

What's your prognosis for global change: Where are we heading to?

I can't actually give you a prognosis. All the involved elements are too complex. I believe that the economic rationale is dominant regarding many negative aspects of global change, like global warming, increasing natural disasters, scarce natural resources, and all the social conflicts arising from this context. However, I believe that increasing awareness and individual change of habits can play a decisive role in building resistance and changes with a positive effect. I just don't know if it will be enough (or fast enough) to reverse the negative aspects of global change.

Which one is your personal favorite picture within the collection of My m² Earth?

„Ships of Aral Sea desert“ by Odil Akbarov. It caught my attention at the first glance. Nice composition, good lightning and, at least in my point of view, it reminds us of water issues.

Yesterday the weather was incredibly nice. I saw grandmas eating ice-cream and couples drinking their beer on nice terraces. There were shirtless people playing volleyball and football on the beach, while others took sunbaths and several children enjoyed the water... what a lovely day! Right in front of the beach, however, heavy coats, beanies and gloves were sold at the Christmas Market. This is how December 19th looked like. _____



Donostia - San Sebastián, Spain, December 2015
by Margoth González Woge

our extended summer

Explanatory statements of the jury

This picture nicely shows that global change is felt in everyday lives and activities, and not precisely in negative ways... at least for some. This is an often forgotten perspective or maybe a touchy issue due to the ethical dilemma, but also part of the discourse. The picture thus reminds us of the complexity of global phenomena. Additionally, I also appreciate the accompanying text; we are often in need of background information in order to understand visual messages correctly.

Iago Otero, researcher at IRI THESys



our extended summer

Margoth González Woge is a 31-year-old Mexican who recently moved to Enschede, Netherlands, to work as a visiting PhD at the University of Twente and the 4TU-Centre for Ethics and Technology in the field of Philosophy of Technology. She was initially involved with the animal rights movement and is part of the environmental movement as well. Margoth won with her image “Our extended summer”.

Do you take pictures regularly?

I do, especially when I am traveling.

Do you think photographs can influence human behavior?

I think photos can definitively trigger new perspectives and actions too. Nevertheless, how new media shapes our behavior and the way we experience empathy is not something straightforward. Regarding environmental topics, for example, cognitive dissonance is rather a quite common phenomenon.

What's your prognosis for global change: Where are we heading to?

I think we are heading into complex scenarios where the solutions will not be available in terms of the same model that led us to where we are. We need a paradigm shift that is critical to some foundational myths that, for example, equal progress in terms of GDP growth, or that the answers to how to control global warming should be addressed in terms of technoscientific solutions.

Which one is your personal favorite picture within the collection of *My m² Earth*?

It's „breed in waste“ by Ines Bruchmann!

Don't look just at us! The cows would say that if they were able to do so. This fattening farm or „Cow Hotel“ is located in Sinop, Brazil, near the border between the Brazilian Savanna and the Amazon. Cattle ranching is recognized as one of the drivers of forest losses in the region. Many argue that intensification strategies such as fattening farms can increase productivity and reduce the demand for land, but many controversies remain. _____



Sinop, Mato Grosso, Brazil, July 2015
by Rafael Camargo

Don't look just at us!

Explanatory statements of the jury

This picture forces the observer to look directly into the animal's eyes, which is hardly a comfortable position. Along with the title "Don't look just at us", it can be understood as a call to humankind solving the problems we have caused ourselves, since we cannot decline our responsibility. Despite that potential of emotionalizing, the picture and its text aim for more than moral instruction. They rather tell us about different options and opinions that require the negotiation about what is wrong and what is right, and challenge us to form our own point of view in a complex world.

Anne Dombrowski, science communicator at IRI THESys



Don't look just at us!

Rafael Rodrigues Camargo (see above, *the waterway*)

October 15, 2015 – March 15, 2016

Humboldt-Universität's Geomatics Lab organized a field campaign in Pará State, Brazil, to validate satellite image-based deforestation and forest degradation maps in the summer of 2014. Logging, burning, and subsequent extensive grazing drive large area deforestation, making the area around Novo Progresso one of Amazonia's deforestation hotspots. Natural succession is hard to control on extensive pastureland and illegal burning is commonly practiced to keep the grassland open. Adjacent forests are often affected and previously-forested land is regularly converted into new pastures. _____



Pará state, near Novo Progresso, Brazil, July 2014
by Patrick Hostert

burning jungle

Lacking their own open spaces in an urban environment, the citizens of Berlin garden in a variety of public spaces. _____



Berlin Bellevue, Germany, May 2015
by Johannes Himmelreich

hanging gardens

Probably one of the dramatic failures of human activity on Earth. _____



Muynak, Karakalpakstan, March 2014
by Odil Akbarov

ships of Aral Sea desert

Appropriate care of the countryside conservation area known as Tegeler Fließ is difficult. Heavy machines are expensive and sometimes cannot gain access. To find a more “natural” way of taking care of this area, the local government is using Asian water buffaloes. A large part of the Fließ has been fenced and as of May 2015, the water buffaloes are grazing the area. In winter, they will spend their time at a local farm and will be led into the area again next spring. Funny enough, about a 100,00 years ago, water buffaloes roamed this area freely. I welcome them back! _____



Tegeler Fliess, Germany, May 2015
by Olof Krueger

water buffalo grazing in Berlin

What will our future on Earth look like? How will the atmosphere change, will we still be able to breathe the fresh air, to enjoy the sun, to swim in the water? In what way will humanity (have) adapt to the planet within the next 100 years? _____



Oulanka National Park, Finland, September 2015
by Lisa Frach, Karolina Spolniewski, Elisabeth Eichler, Santtu Laine

floating in time



Werbellinsee, Altenhof, Germany, October 2015
by Lisa Frach

landing stage

The South American Chaco is one of the most rapidly transforming places on the globe—with widespread deforestation to give place to new pastures and soybean fields. _____



Chaco Province, Argentina, October 2015
by Tobias Kuemmerle

deforestation in the Argentine Chaco



Argentina, October 2015
by Matthias Baumann

deforestation in the Chaco

Shifting cultivation, or so-called slash & burn farming, is still widely practiced in South-East Asia and Africa. This photo was taken during a field trip under I-REDD+, an EU FR7 project, in 2011. The widely-spread fire and smoke in Indonesia that year were mainly caused by the burning practice. Yet there is ongoing debate on the social value and ecosystem services linked to shifting cultivation. _____



Northern Laos, December 2011
by Zhanli Sun

shifting cultivation in Northern Laos

The mountainous farming by the Yi ethnic group in Yunnan, China. This photo is an overview of a small village and its land in the high mountains, about 2,500m above sea level. Locals can barely feed themselves. Ecotourism might be a feasible pathway to fight poverty while maintaining this colorful and scenic landscape. _____



Yunnan, China, October 2009
by Zhanli Sun

small-holder farming in Yunnan, China

This photo shows a traditional village located along the upper Yangtze River. The farming on the steep slope has led to soil erosion. Fortunately, the sloping land conversion program initiated by the Chinese government targeted farming on sloped (marginal) land. Whether the program is effective and efficient is still not clear. _____



Yunnan, China, October 2009
by Zhanli Sun

terrace farming along Yangtze River, China

The mountains are green and full of trees. BUT those are actually all plantation rubber trees. _____



Xishuangbanna, China, February 2012
by Zhanli Sun

rubber plantation in Xishuangbanna, China

A massive oil palm plantation is taking over the whole landscape in this region. _____



East Kalimantan, Indonesia, March 2012
by Zhanli Sun

oil palm plantation in East Kalimantan



Northern Burkina Faso, 2013
by Jonas Nielsen

surface water, Northern Burkina Faso



Northern Burkina Faso, 2010
by Jonas Nielsen

gardening in the drylands



Ouagadougou, Burkina Faso, 2013
by Jonas Nielsen

my house, peri-urban Ouagadougou, Burkina Faso

Logging for subsistence use is one of the main drivers of deforestation in Ethiopia. Within the Northern highlands, which was once forested in large parts, often only small remnant forests remain. Fast-growing tree species like Eucalyptus (seen in this picture) have been introduced to allow reforestation and meet the rising demands of a growing population. _____



Ethiopian Highlands, near Lalibela, March 2012
by Julian Oeser

chopping firewood

More for decorative than for practical purposes, these herb and flower gardens hanging in the front yard of a small-town guesthouse in the far corner of Northern Laos reminded me of the type of urban gardening found in Berlin captured by Johannes in another picture in this exhibition. _____



Muang Long, Laos, June 2015
by Cecilie Friis

hanging gardens 2

Das ist schon ziemlich einmalig, finde ich. Sicher ist das blühende Pflänzchen jetzt kein stringenter Beweis für den Klimawandel, aber wahrscheinlich doch ein winziges Puzzleteilchen, ein schwacher Hinweis. Jedenfalls haben wir das noch nie erlebt. Außerdem, es blühen bei uns auch noch einige Rosen, und ich meine auch schon Spitzen von Schneeglöckchen zu sehen. Die Solaranlage auf unserem Dach läuft nun seit fast sieben Jahren, da sie jedes Photon eindeutig zählt, kann man die Entwicklung (zugegeben, sehr kurzfristig) auch in blanken Euros sehen: 2009 = 607 €, 2010 = 617 €, 2011 = 632 €, 2012 = 630 €, 2013 = 637 €, 2014 = 641 €, 2015, bis heute 650 €. Dabei kommt noch hinzu, dass der Wirkungsgrad der Anlage bei höheren Temperaturen sinkt. Dass bedeutet, dass sich die Sonneneinstrahlung über diese Zeit hinweg eindeutig verstärkt hat. _____



Wiesbaden, Germany, December 2015
by Paul

Löwenmäulchen (*Antirrhinum majus*) in December?

Aus meinem Fenster habe ich einen Blick vom Feldberg im Taunus über die Skyline Frankfurts und den Flughafen hin zur Bergstraße. Das Ganze am 01. Dezember bei 12 Grad! Bei klarer Sicht ist am Horizont das Kohlekraftwerk Staudinger zu sehen. Von Maßnahmen gegen den Klimawandel ist nichts zu sehen: Keine PV-Anlagen auf den Dächern der Nachbarn, keine Windkraftanlage im Rhein-Main-Gebiet. Dafür viel Verkehr auf den Straßen, der Lärm der Flugzeuge und die Abgase aus dem Industriepark Höchst, wo 1% der gesamten erzeugten Strommenge in Deutschland verbraucht wird ... :- (_____



Frankfurt Main, Germany, December 2015
by Daniel Philipp

Klimaschutz in Frankfurt?

Als begeisterter Opa und leidenschaftlicher Solarfreak nutze ich Solarthermie (passiv im Wintergarten) und aktiv mit einer solarthermischen Anlage zur Warmwassererhitzung und Heizungsunterstützung.

Ich habe zwei PV-Anlagen. Die auf dem Westdach erkennbare ist eine 3,13 kWp Anlage, deren Strom komplett verkauft wird. Auf dem Gartenhaus und auf der von der Südfassade zur Garage montierten Gestell ist eine 4,5 kWp Anlage mit Solarbatterie, die 2014 zu einer Eigenstromversorgung von 71 % führte. Seit Februar 2015 nutze ich den Strom, um mein Hybridfahrzeug (plug-in) aufzuladen. Das führt zwar zu einem höheren Strombezug aus dem Netz, doch dafür muss ich viel weniger tanken.



38274 Elbe (OT Groß Elbe), Germany, December 2015
by Lutz Wedel

mein Beitrag gegen den Klimawandel

Sign spotted in a park in San Francisco. Very apt, as the erosion was obvious everywhere. _____



San Francisco, California, USA, October 2015
by Anne Kern

erosion control

The world is so rife with things that no one really needs. And this is of course only one crackbrained example.

But people like to be entertained, they love shopping for (useless) things using money they often don't really have, just to feel a little happier for a short moment.

There is so much destruction of soils and waste of raw materials just to push consumption that I just hope more and more people will realize that happiness can't be bought in an endless way...



East Coast of Australia
by Johanna Strauß

Have fun!

Every year since 1945, the staff of Tarfala Research Station in Swedish Lapland roams over “Storglaciären” (engl: the large glacier), taking stake measurements to track changes in ice volume. _____



67.903661, 18.581210, September 2012
by Philippe Rufin

ablation zone



Accra, Ghana, January 2015
by Rossella Alba and Lara Esther Bartels

villas on the wetland

This is a photo I captured several months ago while volunteering with a non-profit organisation called Friends of Trees in the Portland Metro area (Oregon, USA). This photo reminds me of the importance of the natural environment for aesthetic purposes and beauty, but also for the reason that it keeps our air clean and our water pure.

This specific project was planting native trees along the bank of a stream in order to provide shade and reduce erosion. Efforts such as this can improve the quality of rivers and streams, increase biodiversity, improve the nutrient quality of soil, sequester CO₂, and create healthy habitats for species in and around the area. Friends of Trees, and many other non-profit and volunteer opportunities, also are important because they provide a sense of community and shared values among participants. I encourage anyone that is interested in climate change or making the world a better place to volunteer, connect with other passionate people, and donate some time to projects that are directly making a difference. _____



Portland, Oregon, USA, March 2015
by Jack Fraser

volunteer tree planting

Children dream of the mango rains that will hydrate the trees behind them and provide them with the most delicious mangos you have ever tasted. The only problem is the rains were late last year. No one knows when they will come this year, or if they will be enough to support the families that depend on them. _____



Guinea, spring 2011
by Laura Kehoe

mango rains

*I worked in this garden for one year. I found a second family
and learned a lot about urban gardening. _____*



Faranani Garden, Protea Glen, Soweto, 2014
by Antonia Bürke

my familiy in Soweto

The picture shows one of several basins in a coffee processing facility („despulpadora“) in Guatemala.

Some small-scale coffee farmers organized themselves in a „cooperativa“ to build the facility. The coffee beans will get rid of their pulp and be fermented before drying. Before the facility was built, each farmer processed the beans using much simpler machinery and his own lands, and the contaminated water (in Spanish „agua miel“ meaning honey-water) just ran off over the surface and went directly into the soil, river and ground water. The new facility provides at least rudimentary water treatment, for example, by several storage reservoirs and the application of chalk. By 2015, it was expected that the facility had regained the farmers investment costs! _____



Trifinio Region, Guatemala, March 2013
by Torben Voß

washing coffee

This has been a joint forest management area since 1997. It is inhabited by Bale Oromo, who were originally transhumant pastoralists, but have become settled. Grazing pressure is constantly high and almost no regeneration of trees occurs, while at the same time old trees are cut down for construction and fence making. It is a beautiful and diverse silvopastoral landscape with high biodiversity, but continued current land use would eventually eradicate the forest. Excluding livestock for forest regeneration is very difficult and might lead to surface fuel build-up and devastating wildfires. _____



Bale Mountains, Ethiopia, February 2005
by Maria Johansson

grazed subalpine forest in Bale Mountains, Ethiopia

Since 1990 the rural regions of East Germany have experienced great social and political transformation, followed by a process of deindustrialization and very high mobility among young people. This process left many empty public spaces and industrial buildings, vacancies, buildings which lost their social meanings and functions. Until today it seems that they are useless for space-oriented identification within a community. _____



Ebersbach-Neugersdorf (Saxony), Germany, Summer 2015
by Mandy Schulze

empty houses in rural areas

A view across the vast lands of the Navajo Nation. The shot was taken during a student exchange in 2014. I especially like how the rock formation in the foreground highlights the multiplicity of beauty in the desert while it blends with the unmeasurable expanse of the lands. _____



Arizona, USA, March 2014
by Juri Horst

wasteland

Vielen fällt die typische rote Telefonzelle ein, wenn man an England denkt. Seitdem die Anzahl an Handys und Smartphones sich der Anzahl an Erdbewohnern nähert, wird von Telefonzellen in westlichen Ländern immer weniger Gebrauch gemacht. Diese Telefonzelle wurde somit umfunktioniert: als kleine Bibliothek mit gedruckten, analogen Büchern – vielleicht eine gute Ablenkung vom Immer-erreichbar-sein. _____



England, 2012
by Mette Kleinsteuber

upcycling

A picture taken at the Tempelhofer Feld, resembling the new wave of urban gardening. New plants grown in new places to bring green and living quality in growing cities. _____



Tempelhofer Feld, Berlin, Germany, May 2015
by Christian Ulrichs

new plants on new places

Despite its negative image and its serious environmental issues, including deforestation, weathering, infertile and dry lands, Haiti left a truly positive impression on me: solar panels for street illumination in the capital Port-au-Prince, a mainly rebuilt town after the heavy earthquake of 2010 and people driving around the colorful “taptaps” on bikes. So this little bike shop with a repair service became a symbol of change and creativity, making the best from the lack of resources and defining a new form of awareness. _____



Port-au-Prince, Haiti, February 2015
by Stéphanie-Fabienne Lacombe

bike shop and repair service in Haiti

Idle crane on Abovyan Street in front of a 19th century building destroyed in the 1988 Spitak/Gyumri earthquake. Due to lack of financial resources and/or maladministration, large parts of the city center are still in ruins over 26 years after the disastrous earthquake. Street graffiti in front of the construction site. —



Gyumri, Armenia, September 2014
by David Leupold

retry 1988

Global change has affected and will always affect mankind. Only the Earth itself has experienced since the beginning of its existence, as a witness, the steady phases of global change. The most important question is how mankind will deal with their environment in the future. The outcome and the consequences will be a reflection of the made decisions... _____



Berlin, Germany, June 2015
by Chrisaleks

time

Potosí was founded as a mining town in 1546, while Bolivia was still part of the Viceroyalty of Peru. Over the next 200 years, more than 40,000 tons of silver were shipped out of the town, making the Spanish Empire one of the richest the world had ever seen. But such vast wealth also came at a price. Thousands of the indigenous people were forced to work at the mines, where many perished through accidents, brutal treatment, or poisoning by the mercury used in the extraction process. To this day, a workers' collective extracts minerals from the mine. Due to the lack of protective equipment, the work is still very dangerous. Many miners die through cave-ins or from silicosis, a serious disease that damages the lungs, and there's been a recent concern of the whole mine collapsing. Many of the miners survive by drinking extremely strong alcohol, chewing coca leaves, and worshipping Tio – a god of the underworld who holds the power of life and death between his fingers. _____



Potosí, Bolivia, May 2015
by Josephine Förster

silver mine in Potosí, Bolivia

This picture was taken in the Peruvian Andes at an elevation of 4,420 meters above sea level. Due to the melting of the Arway glacier, the lake in the foreground holds more and more water. –



Ancash Region, Peru, July 2015
by Josephine Förster

shrinking glacier

Big cities are changing all the time. Especially in Buenos Aires I saw so many different architectural styles next to each other, telling stories from so many different times... That is fascinating! _____



Buenos Aires, Argentina, March 2015
by Marie Hüttner

the changing city

*Sweeping across a frozen lake on perfectly smooth ice – a true
feeling of freedom!* _____



Täby, Stockholm, Sweden, January 2015
by Magnus Tannerfeldt

freedom on lake ice

*On steep coastal cliffs we should find wild nature and nonanthropogenic influenced square meters??? Not necessarily. The picture shows the breeding habitat of a big seabird called the Northern gannet (*Morus bassanus*, German: Basstölpel) on the Island of Helgoland, where a stable population of these nice blue-eyed birds breed. Unfortunately the parent birds of the breeding colony nowadays collect waste instead of seaweed to prepare the nests for their offspring on the rocky ledges. As an environmental scientist, I knew about the facts and environmental problems of marine pollution long ago, but to be confronted with that pretty-ugly picture made me truly sad. We really should reduce our plastics..! _____*



Island of Helgoland, Germany, August 2015
by Ines Bruchmann

breed in waste

Pure, fresh water: the basis for life, growth, harvest, health, wealth ... and joy and pure happiness.

The picture reminds me of the endless water cycle on Earth: falling from the sky down on one square meter of Earth...dribbling, flowing, flooding to other square meters, spreading life and evaporating back to the sky.

In the moment the picture was taken, it was lovely to see children playing with the water coming from fountains and some of the desperate parents trying to prevent their children from getting completely wet on that sunny day in southern Britain. Some moments are carefree and without any problems ;) ____



Worthing, Great Britain, August 2015
by Ines Bruchmann

water in the sky

Wilderness is coming back to 34,500,000 m² (3450 hectares) in Germany:

*The European bison (*Bison bonasus*, German: “Wisent”) a close relative to the American buffalo, was almost erased from the Earth due to strong hunting pressure. The last European bison living in the wild was shot in the 1920s. Only 12 of the species survived in zoos. Since that time large efforts have been taken to reintroduce the European bison in Europe.*

But how to breed and reintroduce stable populations if there are only 12 survivors left – 5 males and 7 females?

Luckily, somehow it was managed and the extinction of the bison was prevented. This is why visitors nowadays can watch this cute, but pretty wild (be careful!) juvenile European bison grazing on an abandoned military training area close to Berlin. I feel deeply happy that the European bison is not gone from any square meter of Earth. _____



Reserve „Döberitzer Heide“, close to Berlin, Germany, September 2015
by Ines Bruchmann

come-back of the almost gone

*German tourists are easy to identify – they are mostly very well-equipped with expensive functional wear. *haha**
Originally it was simply fun to me to take a rainy picture on the sun-deck of a ship... but after thinking a while, the bad weather picture reminds me of the long-term risks of climate change and the discussion on necessary mitigation strategies. Surely, mitigation strategies preventing risks of climate change are much more expensive than umbrellas or functional wear. Not every country can effort that. There is also so much socioeconomic injustice in the discussion. Well, I'm happy that in Paris the decision was taken to reduce climate emissions globally, but I'm really worried. Why do we risk the 2 degree-level and continue dancing on the brink? _____



Sun-deck of a ferry, Atlantic, September 2015
by Ines Bruchmann

If we talk about the risks of sea-level rise caused by climate change, it seems that this is more an issue of far-away Pacific countries or only relevant someday in the distant future. This picture was taken on a small non-dike protected island in the German Wadden Sea area (Hallig Langeneß). People have lived on the island since 1600 (BC). Today around 135 people live on those 11,570,000 m² of Earth that have been transformed and changed with every tidal period for hundreds of years. Looking in the chronicle of the island, I've learned that a high tide of about 4 meters above normal sea level caused serious damage to the island several times in the past. What will the level of future high tides be? _____



Wadden Sea, Hallig Langeneß, Germany, August 2013
by Ines Bruchmann

sea level rise

I'm sometimes a very impatient person and sometimes I feel humankind is climbing much slower than a snail towards sustainable living.

The picture shows a land snail that is climbing a sandy and salty dune. Surprisingly, the snail was climbing its path impressively fast. _____



Dune close to Skagen, Denmark, October 2014
by Ines Bruchmann

long way towards sustainability

How many plant species live in only one square meter of trivial grassland?

We ask this question to students in teacher training and let them find out in practical field-courses. In most cases the students are impressed and amazed how much plant and animal life they can find if they only take some time and a close look at one square meter of the Earth. _____



Abandoned military training area, Flensburg, Germany, July 2013
by Ines Bruchmann

take your time and a close look

The picture shows a Spica of an autochthonous savanna grass at sunset. Just one of these perfect moments of high aesthetic and emotional value: I felt close to nature in such a beautiful place!

Next morning, however, leaving the reserve and traveling along, I realized the influence of globalization that brought great changes i.e. homogenization to the landscape. Originally the Colombian great plains (Llanos) were mainly covered by natural savanna vegetation. The Llanos ecoregion was always of great economic importance to the people. Today most of the area has been transformed by intensive cattle grazing and the natural savannas are being replaced by introduced pastures for rising the yields. Large areas of the Llanos ecosystem are today covered with monocultural plantations of rubber and pine trees. Due to this transformation, species and habitat diversity of the Llanos was largely reduced. _____



Los Llanos, Colombia, March 2015
by Ines Bruchmann

aesthetic values of landscapes

The Salar de Uyuni is the world's largest salt flat. It also contains large amounts of valuable lithium, used in industry e.g. for producing electric batteries.

Exploitation of the Salar for lithium has just begun. Keeping in mind that Bolivia holds almost half of the world's lithium reserves, I wonder how the landscape will change in the next few decades. _____



Salar de Uyuni, Bolivia, March 2011
by Kathrin Klementz

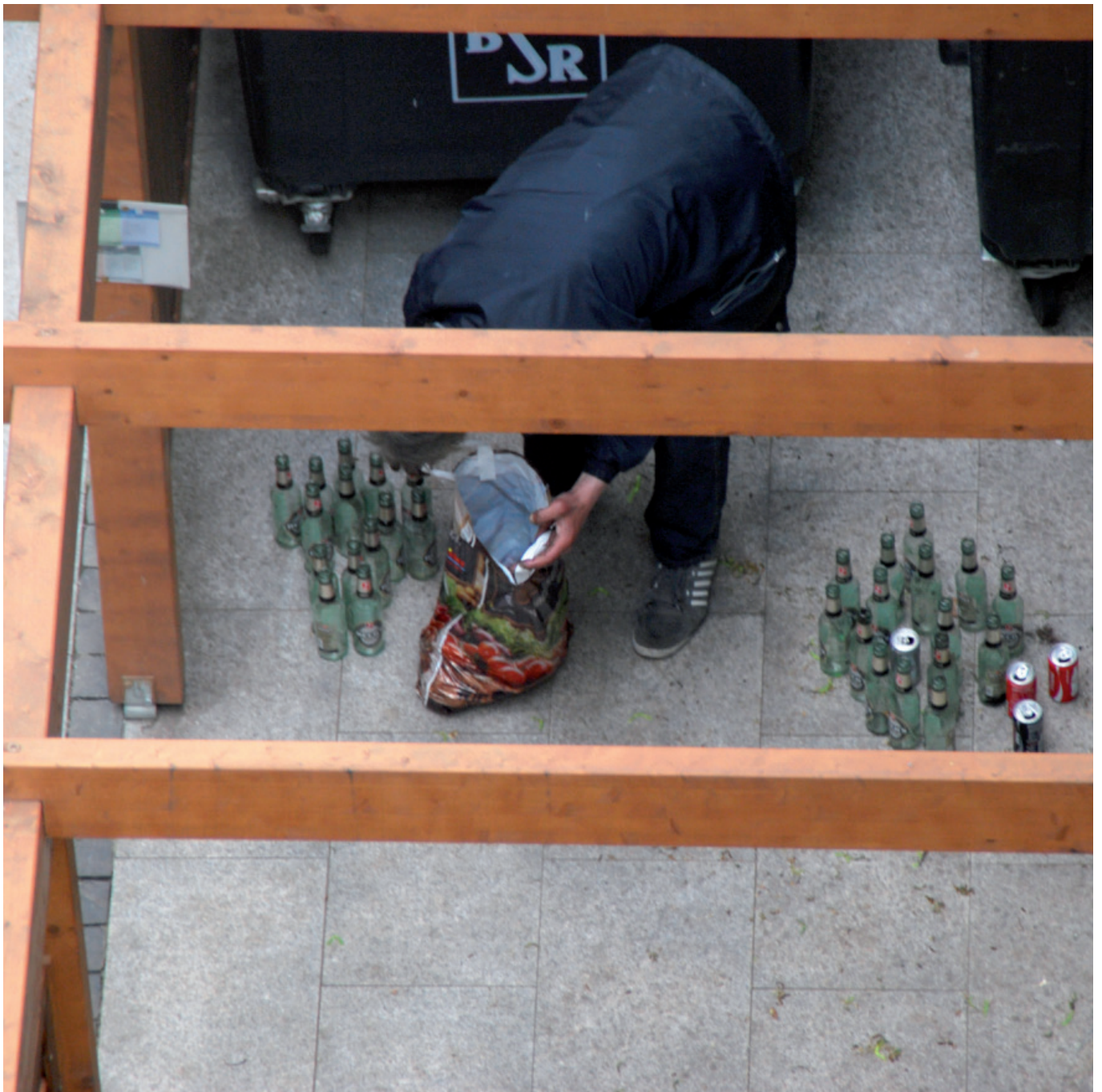
salar de Uyuni – on the threshold of change

Regularly at the rubbish dump in our courtyard I can observe poor people gathering bottles and cans with to refund out of our general trash. There are people living in our house who, without any thought to their behavior, litter resources as well as their money directly into any bin instead of putting it into the recycling container for the particular material.

The same people get very upset about the persons who enter our courtyard to recycle the resources for their benefit. Among other things, they accuse them of leaving a mess. I do not share this perception – they always leave the rubbish dump very tidy compared to our own housemates, whose unreflected consumerism can be well-perceived at the rubbish dump. Reflecting on the scene, I felt it very well represents different aspects of our still unsolved pathways to the future, sustainable Earth, including:

- respectful handling of our resources*
- responsible consumer behavior*
- end hunger and poverty*
- reduce the growing inequality between rich and poor*
- make cities inclusive.*

One of my concerns: How can we change behaviors of individuals for the benefit of all societies for a sustainable future Earth? _____



Wilmerdorf courtyard, Berlin, Germany, May 2015
by Joachim & Katja Janson

*For those two, I think it was just fun:
During the 25th anniversary of the Mauerfall in Berlin, Germany,
they climbed onto one of the last remaining parts of the wall.
But if I turn to other places in the world today, there are many
spots where people try to climb fences or walls – not for fun but
to get to places where they hope for a sustainable future.
I would love to see a ‘future Earth’ where climbing walls is done
for fun, not out of desperation and hope for better living
conditions.* _____



Berlin, Germany, November 2014
by Anja Hansen

Can this be fun?

This photo shows a shepherd in search of water in central México. _____



Atexcac, México, 2011
by Manuel Arredondo

search for water

Inner discovery of sustainability. _____



Rajasthan, India, 2013
by Manuel Arredondo



Ada, Ghana, 2015
by Larissa Tyroller

floating invasion

Turtle that choked to death on a rope. Seashore in Ada Foah, which is famous for turtles coming out of the sea to nest. _____



Ada, Ghana, 2015
by Larissa Tyroller

at the beach looking for turtles

*After heavy rain these bundles of cloth float through the gutters
into the sea and form these sculptures on the beach. _____*



Accra, Ghana, 2015
by Larissa Tyroller

left overs

Even though it was very hot outside, the inside of the house was comfortably cool. The owner explained to me his system and how he trims the plants almost every day to get them in the right shape. Also, the water tank is under the vegetated porch roof to protect it from heating up. _____



Accra, Ghana, 2015
by Larissa Tyroller

green house

Photo taken on the margins of Germany's 2nd Future Earth Summit – still under construction... _____



Berlin, Germany, January 2016
by Katharine N. Farrell

from the Future Earth summit

The Awash River Basin in Ethiopia not only faces land degradation, high population density, natural water degradation, salinity, and wetland degradation. Desertification has also started at the lower Awash River Basin.

As seen here in the picture, more and more water is drawn from the river for agricultural production and intensification with the help of water reservoirs fed by the river and/or dams. There could be drastic climate and ecological changes endangering habitats and human livelihood.

Where to stop or start conserving nature for sustaining livelihoods? _____



Awash River Basin, Ethiopia, September 2015
by Esther Robbe

Conserve nature or sustain livelihoods?

This photo was taken from top of the Ankara Castle. I was bewildered to see how human lives sprawled on nature thoughtlessly. Now, it looks like a war between human beings and nature. We should remember that we're a part of nature, that we're the nature. Destroying ourselves will not bring any good. _____



Ankara, Turkey, 2006
by Özge Can Doğmuş

dilapidated lives

This is the Munzur River, the river of myths. Me and my friends travelled to Dersim on a 3 a.m. bus on the day of the Munzur Festival. Right after we entered into the city, a very famous folk song started to play on the radio. The driver turned up the volume. It was a love story and the singer was praising his love by equating her to the nature of Dersim. After a long journey, we sat by the Munzur River and had plans to go swimming. The water was inviting. Then someone told us that they release the city's sewage into the Munzur. This did not bother some rebellious children who were swimming nearby.



Dersim (Tunceli), Turkey, 2008
by Özge Can Doğmuş

This picture was taken early in the morning from the quiet and empty Kirra Beach in Coolangatta (Queensland, Australia), looking towards Surfers Paradise, the most built-up coastal tourism center in Australia. The skyline of Surfers Paradise seemed to be emerging from the light morning mist at just that moment, somewhat mystical and yet very real. It was as if someone wanted to tell a story of “coastal futures” and ask: Is that what you want? _____



Kirra Beach, Coolangatta, Australia, September 2013
by Barbara Neumann

Coastal futures, emerging from the morning mist?

Man chasing away the cheeky monkeys on the rooftops. An example of the interaction between humankind and nature – sadly one that rarely contains respect- and thoughtful. _____



Kandy, Sri Lanka, February 2012
by Clara Sichau

confrontation between nature and humankind

Expecting an old and rustic cottage in the Brandenburg countryside, I was surprised to find a refurbished building that even looked like that! Maybe our images of the countryside should change as the countryside itself obviously does. _____



Schönhof Chorin (Brandenburg), Germany, March 2015
by Silvio Schwartz

glass ceiling in the countryside

The eastern half of Berlin changed its nationality on October 3rd, 1990, transforming itself from the capital of the German Democratic Republic to the united capital of the Federal Republic of Germany. That transformation changed not only the economic system but also the lives of millions of people. In 2009 – 20 years after the wall came down – copywriter Jean-Remy von Matt painted the building as shown in the picture, meaning: “The human will can move anything. This house once stood in a different country”.

Isn't it ironic that one of the leading figures of marketing, a symbol of capitalism, commemorates the East German civil rights movement? Or maybe he's just thankful because it helped enlarge the market, which once stood in a different country.



Brunnenstraße, East Berlin, Germany, September 2012
by Silvio Schwartz

talking houses #1

We are not the only ones who change our environment. It has the ability to change us as well. The “Take Courage building” has reminded us of this since the 19th century. ____



Redcross Way, Borough Market, London, Great Britain, January 2016
by Silvio Schwartz

It's simple, fun, costs nothing and every single person can do it either in their backyard or even in small balconies. It can also be a great activity with your kids. My mom just makes her own compost with some raw food leftovers intercalated with some leaf litter. After a while, she sows some seeds that she removes from veggies when cooking or even some potatoes, tomatoes, courgettes, among other veggies, which just naturally grow once they are buried in the compost. _____



Cananéia, São Paulo, Brazil, July 2012
by Rafael Camargo

growing our own veggies

*Why is a simple salad prepared by my grandma so delicious?
No secret recipe! The key is only fresh organic veggies she just
picked in her nice, green backyard, and then prepared with
love. Let's keep such traditions alive! _____*



Ribeira, São Paulo, Brazil, December 2012
by Rafael Camargo

grandmas' recipe

During an expedition to explore and document caves in the remote mountainous area of Balbalan (Kalinga Province, Philippines) our team was warmly hosted by locals such as this family. The photo was taken trying to capture their precious moment of gathering together around the fire. For them it is the daily routine after working on the rice terraces, but for me that atmosphere was amazing: looking hypnotized to the fire, awaiting dinner, sharing that moment without mundane distractions that just separates us. _____



Canao Sitio, Balbalan, Kalinga, Philippines, January 2015
by Rafael Camargo

a precious moment

High-tech agriculture has become more and more accessible. What was supposed to be the solution for higher productivity entailing the lesser extension of land is actually putting the forest under pressure. Business became more profitable and they always want more. _____



Sinop, Mato Grosso, Brazil, July 2015
by Rafael Camargo

expanding towards the Amazon forest

Amazon Rivers have their flooding cycles and the people who live there are used to it. However, it is changing pretty fast. The floods are getting bigger and the droughts are getting longer. To what extent will it be possible to reverse it? _____



Santarém, Pará, Brazil, July 2015
by Rafael Camargo

Natural flooding cycles?

In the 1970s the Brazilian government offered farmers land to be developed in the Amazon region. For instance, along the road BR-163. The lack of planning of earlier times is today's hard reality. In the town called "Novo Progresso" (Portuguese for new progress) this is still a common scene. The forest is gone, but do you see the progress? _____



Novo Progresso, Pará, Brazil, July 2015
by Rafael Camargo

new progress

First selective logging. High-value timber is of course cut and sold (for instance, to the American and European market) but then the forest is unfortunately just burned. But the thing is that it's not slash-and-burn, the subsistence agricultural technique. That is in big scale, to create clean land and create space for extensive areas of cattle or monocultures. It's the cheapest way to create clean land, though at the expense of GHG emissions, decreases in soil quality, and loss of biodiversity, to name just a few environmental issues. _____



Parauapebas, Pará, Brazil, June 2011
by Rafael Camargo

what's not cut, is burned



Santarém, Pará, Brazil, July 2015
by Letícia Hissa

land use change in the Amazon region

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